

Patent Application of
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for
TITLE: MICROKETTLE

CROSS-REFERENCE TO RELATED APPLICATIONS: This application claims the benefit of
PPA Ser. Nr. 60/403,097, filed 2002 Aug. 12 by the present inventor.

FEDERALLY SPONSORED RESEARCH Not Applicable

SEQUENCE LISTING OR PROGRAM Not Applicable

BACKGROUND OF THE INVENTION—FIELD OF INVENTION

This invention relates to kitchen appliances, specifically relating to heating water to a desired temperature.

BACKGROUND OF THE INVENTION

Kettles are common appliances used in almost every private, and restaurant kitchen for the purposes of heating water.

Water is heated often to make tea or coffee, but has a wide variety of other purposes. For example hot, or heated water is called for in various cooking recipes, as well as many instant drinks and meal packages.

Prior kettles are designed to give a signal when the water being heated in them is boiling. However, the kettle is otherwise imprecise for displaying the specific temperature of the water it is heating. Therefore prior kettles are not convenient for heating water to a desired temperature (other than boiling).

Common kettles also lack to demonstrate how much water is contained inside them. There is no convenient way to measure the volume of the liquid inside them.

Prior kettles commonly have no method for filtering impurities out of the water they heat. Their sole purpose is to boil water and indicate when the water is boiling.

Additionally, prior kettles are made for intended use on stove-tops. There are two disadvantages to stove-top heating.

One disadvantage is a potential fire hazard. A person may begin to heat a kettle, forget about it, and leave the house with the stove-top on, creating a dangerous situation.

Another disadvantage is that, because kettles require stove-tops, they can not be used in places without stoves (or stove burners). It is common for many student dormitories and office kitchens to have a microwave oven, but have no stove or stove burners.

BACKGROUND OF INVENTION-OBJECTS AND ADVANTAGES

Patent Application of Jessica Miller for "Microkettle" continued
Page 3

Accordingly, several objects and advantages of the present invention are:

- (a) to provide an appliance which can be used to heat liquid in a microwave oven;
- (b) to provide an appliance which contains a readable thermometer;
- (c) to provide an appliance which filters impurities from the water it heats;
- (d) to provide an appliance which will not cause a potentially hazardous situation;
- (e) to provide an appliance which can be used in school dormitories, office kitchens and places that have a microwave oven, but no stove top.

Further objects and advantages of the present invention will become apparent from a consideration of the drawings and ensuing description.

SUMMARY

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In accordance with the present invention a micokettle comprises a container with a readable thermometer, ^{designed} to heat water in a microwave oven to a desired temperature. It has additional features such as a removable water filter and a volume measure.

DRAWINGS—FIGURES

FIG. 1 is a side elevational view of a kettle according to one embodiment of the invention.

FIG. 2 shows that the kettle has a removable lid.

FIG. 3 shows a removable filter in use.

DRAWINGS—Reference Numerals

10 kettle	12 main body of kettle
14 bottom of kettle	15 top of kettle
16 receptacle	18 handle
20 thermometer	22 volume measure
24 spout	26 lid
28 removable filter	30 top of filter
32 bottom of filter	40 hinges on top of kettle
42 thumb-rest	50 spout opening

DETAILED DESCRIPTION OF THE INVENTION

Referring to FIG. 1, a preferred embodiment of a kettle **10** is shown. The kettle **10** is approximately 18 cm tall and 23 cm wide. The kettle **10** has a main body **12**, which contains a handle **18**. The main body **12** has a bottom **14**, a top **15**, and portions that define a receptacle **16** for receiving and containing water, or other liquids. The kettle **10** also has a lid **26**, a spout **24**, a thermometer **20**, and a volume measure **22**.

A preferred embodiment of the thermometer **20** has approximate measurements of 3 cm tall and 10 cm wide. It is positioned closely towards the bottom of the kettle **14**. This allows the temperature of any liquid inside of the kettle **10** to be determined, even if the volume of that liquid is minimal. The preferred embodiment of the thermometer **20** has markings of degrees of temperature that are large and colored. This allows that they are readable, even while the kettle **10** is being heated inside of a microwave oven (with a transparent door).

A preferred embodiment of the kettle **10** includes a volume measure **22**. The volume measure **22** is a transparent window. It is approximately 3 cm wide, and 14 cm tall. The volume measure **22** is on the side of kettle **10**, situated in a vertical position. It has opaque volume measurement markings along it, for example “100 ml, 200 ml, 300 ml” so that the volume of liquid inside of kettle **10** can be easily determined.

A preferred embodiment of the handle **18** allows it to contain some water, in order to maximize the amount of liquid that the kettle **10** can contain. It has a gripping radius and a texture that is comfortable and easy to use.

Referring to FIG. 2, a preferred embodiment of the removable lid **26** is shown. The lid **26** has a hinged thumb-rest **42** on one side and a spout opening **50** on the opposite side. The hinges on the top of the kettle **40** meet the hinged thumb-rest **42** of the lid **26** so that it can be levered, enlarging the opening of the spout **24**.

Additionally, the design of the lid **26** allows the lid **26** removed entirely from the top of the kettle **15** by lifting the hinged thumb-rest off of the hinges on the top of the kettle **40**.

The spout opening **50** on the opposite side of the lid **26** allows liquid to be poured out of the kettle **10** even when the lid **26** is fully on the main body of the kettle **12**.

Referring to FIG. 3, a preferred embodiment of a removable filter **28** is shown. It has a top **30** and bottom **32**. The top of the filter **30** is made to receive water, much like the top of a funnel. It is rounded and somewhat thick in order to guide liquid into its filtering system. The bottom of the filter **32** is made to meet directly with the top of the kettle **15**.

This meeting is such that water passing through filter **28** will be routed directly through filter **28** and into the kettle **10** without any leaking between the bottom of the filter **32** and the top of the kettle **15**.

Operation

The kettle **10** is used for heating liquid, most often water, to a desired temperature.

Take the lid **26** off of the main body of the kettle **12** by lifting its hinged thumb-rest **42** off of the hinges on top of the kettle **40**, and set it aside. Place the filter **28** so that it fits into the top of the kettle **15**.

Fill the kettle **10** with the cold tap water, passing it through the filter **28**. (Cold tap water contains fewer impurities than hot tap water.)

Use the volume measure **22** in order to achieve a desired specific amount of liquid.

Once the kettle is filled, remove the filter **28** and replace the lid **26** by re-attaching the hinged thumb-rest **42** to the hinges on the top of the kettle **40**.

Next, heat the kettle **10** in a microwave oven (not shown) until the desired temperature is indicated on the thermometer **20**.

Pour the liquid out of the kettle **10** by gripping the handle **18** and guiding the liquid out through the spout **24** and the spout opening **50**.

The thumb-rest **42** may be used to lever the lid of the kettle **26** in order to enlarge the opening of the spout **50**.

Although the description above contains many specifications, these should not be construed as limiting the scope of the invention but as merely providing illustrations of some of the presently

Patent Application of Jessica Miller for "Microkettle" continued
Page 6

preferred embodiments of this invention. For example, the thermometer can have a colored display with every degree marked or it can consist of a digital representation of the degree reading, and the thermometer may even contain an audio sensor that makes a noise when the liquid is boiling; the handle can be built as part of the main body of the container, containing liquid when the kettle is filled, or it can be an attachment outside of the container; the lid can have hinges as discussed, or it can be made to simply rest on the top of the main body of the kettle without hinges, etc. 7/29/03
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Thus the scope of the invention should be determined by the appended claims and their legal equivalents, rather than by the examples given.